

WHAT IS CLAIMED IS:

1. An multi-functional device comprising:

an outer casing having a front side, a rear side
opposing the front side, and a lower side;

a shaft supported on said outer casing;

a recording section that records images on a recording
medium; and

a reading section that reads images from a document,
said reading section having a front edge substantially in
coincidence with the front side of said outer casing, a back
edge opposing the front edge, left and right walls, and a
lower surface, (said reading section being disposed above
said shaft and rotatable about said shaft to separate from
said recording section, whereby a space is provided above
said recording section.) its space

2. The multi-functional device as claimed in Claim 1,
wherein said reading section is disposed closer to the front
side of said outer casing than said recording section and is
rotatable toward the front side of said outer casing.

3. The multi-functional device as claimed in Claim 1,
wherein said shaft is disposed adjacent to said recording
section and disposed nearer the front side of said outer
casing than said recording section.

4. The multi-functional device as claimed in Claim 1,
further comprising a control panel having a front end

substantially in coincidence with the front side of said outer casing, a rear end opposing the front end, and a lower surface, wherein said reading section is disposed on the lower surface of said control panel and rotatable together with said control panel, such that the front end of said control panel rotates downward.

5. The multi-functional device as claimed in Claim 1, further comprising a document holding section that extends from the rear end of said control panel for supporting documents to be conveyed to said reading section, wherein said document holding section is rotatable together with said reading section and serves as a cover for covering said recording section when not rotated open.

6. The multi-functional device as claimed in Claim 1, wherein said recording section comprises an ink-jet printer provided with an ink cartridge that can be upwardly removed from said ink-jet printer after rotating said reading section away from said recording section.

7. The multi-functional device as claimed in Claim 1, wherein said reading section is disposed adjacent to said recording section and covers at least a portion of said recording section.

8. The multi-functional device as claimed in Claim 4, further comprising a document discharge tray pivotally and detachably mounted near the front edge of said reading

section for receiving documents discharged from said reading section, wherein said document discharge tray is maintained at a predetermined angle with respect to a direction in which the documents are discharged when in use and is rotatable in a direction opposite the rotating direction of said reading section. ✓

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9. The multi-functional device as claimed in Claim 8, further comprising a document discharge tray mounting portion on which said document discharge tray is mounted, wherein said document discharge tray is mounted on said document discharge tray mounting portion from upward.

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10. The multi-functional device as claimed in Claim 8, further comprising a recording paper discharge tray having an underside, rightside and a leftside, said recording paper discharge tray being provided on the front end of said outer casing for receiving recording paper discharged from said recording section, said recording paper discharge tray normally slanting upward and being displaced downward due to contact from said reading section when said reading section is rotated.

11. The multi-functional device as claimed in Claim 10, further comprising an urging member, wherein said recording paper discharge tray is rotatably supported on said outer casing and is supported by said urging member to slant upward. ✓

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12. The multi-functional device as claimed in Claim 11,
wherein said urging member comprises a leaf spring that
supports said recording paper discharge tray by contacting
the underside of said recording paper discharge tray at a
center between the leftside and the rightside. ✓

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13. The multi-functional device as claimed in Claim 11,
wherein said leaf spring is provided beneath said recording
paper discharge tray and also beneath an opening formed on
the lower side of said outer casing; said recording paper
discharge tray comprises a downward protruding portion that
contacts said leaf spring via the opening.

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14. The multi-functional device as claimed in Claim 10,
wherein said document discharge tray contacts said recording
paper discharge tray when said reading section is rotated
and rotates in a direction opposite the rotational direction
of said reading section into a receded position. ✓

15. The multi-functional device as claimed in Claim 10,
wherein said outer casing comprises left and right side
covers, between which said reading section is rotatably
supported on said shaft; said reading section has left and
right walls on which ribs are formed, the ribs being in
sliding contact with said left and right side covers at all
times, even when said reading section is rotated. ✓

16. The multi-functional device as claimed in Claim 15,
wherein the back edge of said reading section protrudes

above said left and right side covers when said reading section is rotated; the ribs comprise linear protrusions extending in a direction nearly parallel to said control panel, such that one portion of the ribs protrudes above said left and right side covers when said reading section is rotated.

17. The multi-functional device as claimed in Claim 1, wherein said outer casing comprises side frame plates formed with holes; said shaft having two ends and comprises a hollow cylindrical member integrally provided on the lower surface of said reading section and supported via penetration of the two ends through the holes in the side frame plates; and a harness connected to said reading section passes through said hollow shaft and extends externally.

18. The multi-functional device as claimed in Claim 17, wherein said shaft has end openings and a circumferential surface formed with an opening in fluid communication with the end openings, and the harness passing through said hollow shaft extends externally via the opening; and surfaces around the end openings are capable of contacting ribs provided on inner walls of said side frame plates.

19. The multi-functional device as claimed in Claim 1, wherein stopper members are provided on the left and right walls of said reading section for contacting said side frame

